

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027884**Date Inspected:** 01-Jul-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** jobsite

<b>CWI Name:</b>	Fred Michaels/William Sherwood			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	OBG	

**Summary of Items Observed:**

At the start of the shift this Quality Assurance Inspector (QA) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) welding and Quality Control (QC) personnel. The observations and inspections were performed as noted below:

This QAI observed Welder Eddie Brown (ID#9331) using a rosebud torch to preheat stiffener splice 13W-14W-LS-2 to a QC recorded, QA verified temperature of 150F. Preheat temperature was measured using a Tempil Stick. This QAI noted QC Tony Sherwood recording preheat temperature whenever there was a stop in work.

QAI witnessed the welding of Stiffener 13W-14W-LS-2 by welder Eddie Brown utilizing the Shield Metal Arc Welding Process in the 3G position using E7018 consumable electrodes. The QC recorded and this QAI verified that the weld metal was being deposited to the parameters of the applicable Welding Procedure Specification. Welder Brown was observed using the stringer method and good workmanship practices in regard to interpass cleaning.

This QAI observed Welder Tran Chau (ID#7889) using a rosebud torch to preheat floor beam splice PP123-W2.8-BF3 to a QC recorded, QA verified temperature of 150F. Preheat temperature was measured using a Tempil Stick. This QAI noted QC Tony Sherwood recording preheat temperature whenever there was a stop in work.

QAI witnessed the welding of Stiffener PP123-W2.8-BF3 by welder Tran Chau utilizing the Shield Metal Arc Welding Process in the 3G position using E7018 consumable electrodes. The QC recorded and this QAI verified

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

that the weld metal was being deposited to the parameters of Welding Procedure Specification ABF-WPS-D15-1100. Welder Chau was observed using the stringer method and good workmanship practices in regard to interpass cleaning.

This QAI observed Welder Wen Han Yu (ID#6317) using a rosebud torch to preheat floor beam splice PP121.5-W2.5-BF1 to a QC recorded, QA verified temperature of 150F. Preheat temperature was measured using a Tempil Stick. This QAI noted QC Tony Sherwood recording preheat temperature whenever there was a stop in work.

QAI witnessed the welding of Stiffener PP121.5-W2.5-BF1 by welder Wen Han Yu utilizing the Shield Metal Arc Welding Process in the 3G position using E7018 consumable electrodes. The QC recorded and this QAI verified that the weld metal was being deposited to the parameters of Welding Procedure Specification ABF-WPS-D15-1100. Welder Chau was observed using the stringer method and good workmanship practices in regard to interpass cleaning.

QAI observed the preheating of weld joint W12 Corner Drop-In W2.1 by Welder Roby Smith, utilizing the use of a rosebud torch. The joint was preheated to a Quality Control Recorded; Quality Assurance verified temperature of 150F. This QAI observed QC inspector Fred Michaels take multiple temperature readings along the length of the weld joint prior to the start of welding operations, and after work stoppages randomly throughout the day. Inspector Michaels was using an Infrared non-contact heat gun to record preheat temperature, this QAI verified readings using a Tempil Stick at random intervals throughout the day.

This QAI observed Roby Smith utilizing the Flux Cored Arc Welding Process to the following parameters 242 amps, 28 volts, which fall within the range of the governing Welding Procedure Specification ABF-WPS-D15-F3200-2. This QAI observed Quality Control Inspector Fred Michaels recording welding parameters at various times throughout the shift and this QAI verified parameters at random intervals.



### Summary of Conversations:

There were general conversations with Quality Control Inspector Fred Michaels, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Danny Reyes and Bill Levell.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510 385 5910, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Daggett,Matt	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

---